PHILIPS

**Philips Medical Systems**
**Development and Manufacturing Centre**

**SERVICE MANUAL**
**732**
**UNIT**

# Release Bulletin PCR User Terminal

# DICOM/ WLM - RIS Option R 1.5 L1

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## SERVICE MANUAL - UNIT

# Release Bulletin PCR User Terminal DICOM/ WLM - RIS Option R 1.5 L1

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In case there are any questions concerning this manual,
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1...7 (01.0)

| | | |
|---|---|---|
| DICOM Conformance Statement USIT 1.5 | 4512 131 81001 | |
| Floppy | 4512 116 04001 | (only to factory) |


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## 1 Introduction

In this document you will find the instructions to install and configure the DICOM/ WLM - RIS option software, also known as WLM RIS.
The information contained in this bulletin has been carefully checked and is believed to be entirely reliable. However, as Philips Medical Systems improves the reliability, function, and design of their products, the possibility exists that information may not be current.

**Supplied Software:**
DICOM/ WLM - RIS Option R1.5 L1 ..... 4512 201 01051
Installation Diskette + Option Bulletin + DICOM Conformance Statement

**Applicable Documents:**
Service Manual PCR User Terminal ..... 4512 984 0490.
Release Bulletin PCR User Terminal R1.5 L1 ..... 4512 984 24761

**What's new:**
- First edition

**Abbreviations And Acronyms:**
DICOM ..... Digital Imaging and Communications in Medicine
HIS ..... Hospital Information System
PCR ..... Philips Computed Radiography
RIS ..... Radiology Information System
Server USIT ..... USIT with the Reader connected to it and with the database
USIT ..... PCR User Terminal
WLM ..... Worklist Management


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# 2 Software Installation

**Prerequisites:**
- The same release/level of the PCR User Terminal software is installed on the USIT.
- The operation of the USIT in service mode is known from the Release Bulletin PCR User Terminal.
- All known Procedure Codes of the DICOM/ WLM RIS must also be defined at the PCR User Terminal.

**Note: The DICOM/ WLM - RIS option has to be installed at the Server USIT only!**

**Procedure:**

- At the Server USIT select the service menu ***OS/2 command shell***.
- Insert the **DICOM/WLM - RIS Option Installation Diskette** into the floppy drive.
- Type in **a:install** <Enter> to start the installation.

  Following messages appear on the display:

```
Install DICOM/WLM RIS Option for
PCR User Terminal R1.5.L1

Copying the DICOM WLM RIS files
   reading from diskette
   writing to hard disk

Changing configuration ...

DICOM Worklistmanagement RIS option installed
```

- When the option has been successfully installed the configuration tool starts with:

```
DICOM/WLM-RIS Configuration – Main Menu
[1]  Edit DICOM/WLM-RIS Configurations
[2]  'Ping' DICOM/WLM-RIS Server
[3]  Send DICOM ECHO command to DICOM/WLM-RIS Server
[4]  Perform test query

[Q]  Quit
Enter choice  [1-4, Q]:
```

- Enter **[1]** and execute the configuration explained in the next chapter.


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# 3 Configuration

The configuration tool will be started automatically during the installation of this SW option.

For later changes the configuration tool can be started in the following way:

- At the Server USIT select the service menu ***OS/2 command shell***.
- Enter ***wlm_cfg*** and <Enter>.
- Select ***Edit DICOM/WLM-RIS Configuration.***

  Configurable items:
  [1] Interval for worklist queries
  [2] IP address of DICOM/WLM-RIS server
  [3] IP port of DICOM/WLM-RIS server
  [4] Application entity title of DICOM/WLM-RIS server
  [5] Application entity title of USIT RIS client
  [6] USIT Modality
  [7] Attributes used for worklist query

- Leave the configuration tool.
- Save the changes to the hard disk.
- Make a backup onto a floppy diskette.
- Reboot the PCR Terminal.

More details than explained online in the configuration tool can be found in the DICOM Conformance Statement USIT 1.5.

## 3.1 Interval for Worklist Queries

Enter the interval for queries. The interval specifies how often a worklist query is issued.
Allowed values are 10 to 600 seconds.

Default value: 30

## 3.2 IP Address of DICOM/WLM- RIS Server

Enter the IP address of the DICOM/WLM- RIS Server in format ‘nnn.nnn.nnn.nnn’ .
Consult your RIS Server configuration if uncertain.

Default value: 127.0.0.1

## 3.3 IP Port of DICOM/WLM- RIS Server

Enter the IP port number of the DICOM/WLM- RIS Server (0-65535).
Consult your RIS Server configuration if uncertain.

Default value: 3000

## 3.4 Application Entity Title of DICOM/WLM- RIS Server

Enter the application entity title of the DICOM/WLM- RIS Server (max. 16 characters).
Consult your RIS Server configuration if uncertain.

Default value: RIS


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## 3.5 Application Entity Title of USIT RIS Client

Enter the application entity title that will be used to identify the USIT (max. 16 characters).
The value used in worklist queries if the application entity title is included in the query attributes.

Default value: USIT Tip: Simply enter the AE Title of the EasyVision.

## 3.6 USIT Modality

Enter the modality name that will be used in worklist queries.
This value is usually set to 'CR' for a PCR system.

Default value: CR

## 3.7 Attributes Used for Worklist Query

This setting controls which attributes are used to compose a worklist query.
If more than on attribute is specified the different subqueries are combined with 'AND' .
If no attribute is specified then USIT will query for all worklist items available from the DICOM RIS.

**Application entity title:**

The query value used for the Application entity title is the value entered for the USIT Application entity title. If this attribute is included in the query, only examinations scheduled for this specific application entity will be added to the worklist.

Include attribute (y/n)?

**Series modality:**

The query value used for the Series modality is the value entered for USIT Modality. If this attribute is included in the query, only examinations scheduled for a specific modality (e.g. 'CR') will be added to the worklist.

Include attribute (y/n)?

**Scheduled Procedure Step Start Date:**

The query value for the Scheduled Procedure Step Start Date is the current date. If this attribute is included in the query, only examinations scheduled for today will be added to the worklist.

Include attribute (y/n)?


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# 4 Backup/ Restore of Configuration

- Select the service menu ***OS/2 command shell***.
- Insert a back-up diskette into the floppy drive.
- Copy the configuration file with the command: **copy c:\user\usit\wlm_cfg.ini a:**

  For restoring the configuration enter the command: **copy a:\wlm_cfg.ini c:\user\usit**

# 5 Checking the DICOM/WLM RIS

- Select the service menu ***OS/2 command shell***.
- Start the configuration tool via the command **wlm_cfg.**

  The following tests can be performed:
  [2] 'Ping' DICOM/WLM- RIS Server
  [3] Send DICOM ECHO command to DICOM/WLM- RIS Server
  [4] Perform test query

**'Ping' DICOM/WLM- RIS Server:**
A 'ping' will be sent to the configured IP address.
With this command the TCP/ IP layer of the connection will be checked.

**Send DICOM ECHO command to DICOM/WLM- RIS Server:**
A DICOM request will be send to the RIS Server.
An answer will be expected.
With this data exchange the Application Entity Titles will be checked.

**Perform test query:**
A DICOM request will be send to the RIS Server.
A complete data set will be received.
Especially the right selection of the attributes will be checked.

# 6 Deinstallation

- Select the service menu: ***OS/2 command shell***.
- Enter the command: **wlm_off**
- Reboot the PCR User Terminal(s) to make changes effective.

The last configuration will be kept automatically on hard disk.
To activate the DICOM/ WLM RIS this option must be installed again.


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